BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 3: e35232
doi: 10.3897/biss.3.35232

OPEN ACCESS

Conference Abstract

Caught in the concept jungle: developing a format for data contributions to the World Flora Online

Walter G. Berendsohn[‡], Chuck Miller[§], William Ulate[§], Mark Watson[|]

‡ Freie Universität Berlin, Botanic Garden and Botanical Museum, Berlin, Germany
§ Missouri Botanical Garden, St. Louis, MO, United States of America
| Royal Botanic Garden Edinburgh, Edinburgh, United Kingdom

Corresponding author: Walter G. Berendsohn (w.berendsohn@bgbm.org)

Received: 06 Apr 2019 | Published: 13 Jun 2019

Citation: Berendsohn W, Miller C, Ulate W, Watson M (2019) Caught in the concept jungle: developing a format for data contributions to the World Flora Online. Biodiversity Information Science and Standards 3: e35232. https://doi.org/10.3897/biss.3.35232

Abstract

The World Flora Online initiative (www.worldfloraonline.org) is a global consortium of many of the world's leading botanical institutions with the aim to offer a worldwide information resource for plant information (Miller 2019). It aggregates information provided by the botanical community, either through specialized information systems or published taxonomic treatments and floras. WFO distinguishes contributions to the Taxonomic Backbone (i.e. the community-curated consensus system of scientific names, taxa, synonyms and their classification) from Content contributions (i.e. descriptive data, images, distribution, etc.). In the course of writing the guidelines for contributors, a format for the electronic submission of these data had to be developed. The expectation was that this would be a comparatively simple task, drawing on existing TDWG standards and using established formats and tools, i.e. Darwin Core Archive, the Integrated Publishing Toolkit and the DwC-A Validator tool. Actually, it was not that simple, as several problems had to be solved. First of all it was somewhat difficult to find authoritative sources on the web for existing data definitions. That solved, the actual definitions were, in some cases not really adequate for use by the botanical community, or a narrower description had to be given, or our portal software (based on the eMonocot portal system developed by the Royal Botanic Gardens, Kew) required a different controlled vocabulary. A decision was taken to follow the DwC naming conventions for data elements, although in some cases the designations -

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or at least the applications in a checklist context - were patently wrong (e.g. “taxonID” as the identifier for names, including synonyms). For Content contributions, the DwC-A standard star schema was useful, but it was not appropriate for backbone contributions with their multiple relationships e.g., to literature references. This experience underlines the necessity for a coherent documentation of standards (see Blum et al. (2019)), including user-friendly access to definitions, data validation tools and clear guidelines for extensions/ subtyping also at the element-level.

Keywords

TDWG Standards; Darwin Core; Data definition; World Flora Online; Botany

Presenting author

Walter G. Berendsohn

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